

SAVANT

Relay Module for PTAC with One 6-Port Climate Relay and One 10K Thermistor Input Quick Reference Guide

Box Contents

- (1) HVAC PTAC Relay Module - (CLI-PTAC1K1)
- (2) 3 Position Screw Down Plug-In Terminal Block - (O28-0736)
- (1) 6 Position Screw Down Plug-In Terminal Block - (O28-0737)
- (1) 6 Position Screw Down Plug-In Terminal Block - (O28-9352)
- (1) Product and Regulatory Insert (009-1706)

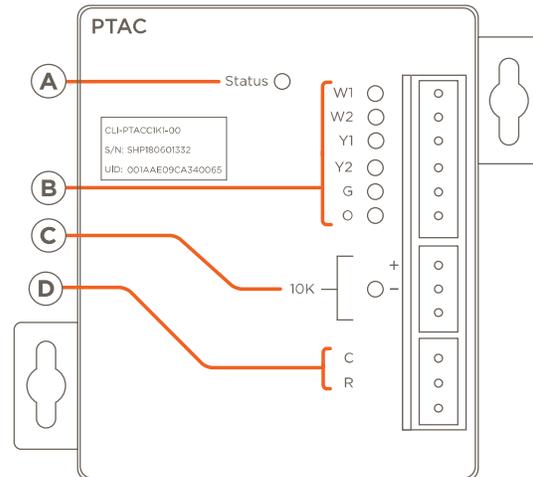
Supported Sensors (available on the Savant Store)

- Remote Temperature Sensor - Flush Mount (SST-TEMP1)
- Outdoor Remote Temperature Sensor (SST-OTEMP1)
- PLENOM Remote Sensor - Commercial (CLI-PLEN1C)
- PLENOM Remote Sensor - Residential (CLI-PLEN1R)
- SLAB Remote Sensor (CLI-SLAB1)

Specifications

Environmental				
Temperature	32° to 104° F (0° to 40° C)			
Humidity	10% to 90% Relative Humidity (non-condensing)			
Dimensions and Weights				
	Height	Width	Depth	Weight
CLI-PTAC1K1	3.77 inch (9.58 cm)	3.16 inch (8.03 cm)	.91 inch (2.31 cm)	< 1 lbs (< .5 kg)
Shipping	6.25 inch (15.88 cm)	4.8 inch (12.19 cm)	1.25 inch (3.18 cm)	< 1 lbs (< .5 kg)
Power				
Input Power	24V AC (19.2 - 28.8V AC)			
Max Current Draw	0.2 amps (rms)			
Maximum Wiring Distances				
RS-485	Up to 1000 feet (304.8 meters) cumulative			
	#24 AWG - 20 feet (6.10 meters)			
	#20 AWG - 57 feet (17.37 meters)			
Power	#18 AWG - 90 feet (27.43 meters)			
	#16 AWG - 143 feet (43.59 meters)			
	#14 AWG - 228 feet (69.49 meters)			
Regulatory				
Safety and Emissions	FCC Part 15			
				
Contains FCC ID:	2AEHU-MESHTEK-H52			
Contains IC:	20059-MESHTEK52			
RoHS	Compliant			
Minimum Supported Release				
Climate Config App	Version 1.1.2			

Top Panel



Blinking Green

RS-485 Communications is not established. Once power is applied, it can take up to 20 seconds to establish communications.



(A)



HELPFUL! If communications was established and subsequently lost, the LED will stay solid for about 1 minute before it starts blinking.

Solid Green



RS-485 communication is established. Module is communicating with thermostat.

Climate Relays - The relay outputs on this module operate similar to the relays of the same name on the thermostat. Connect the relay outputs (W1, W2, Y1, etc) to the appropriate connection on the PTAC equipment. Refer to the [Relay Connections](#) diagram section when making the connections.

(B)

Climate Relay LEDs - The LEDs associated with each relay will light when the relay is energized and be off when relay is in its idle state.

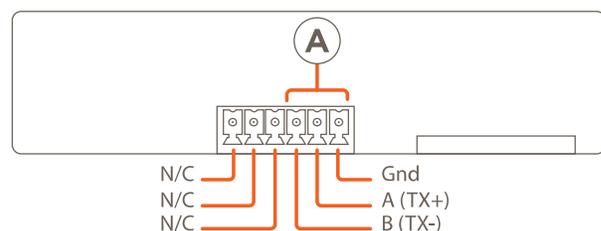
(C)

10K - Input port for a 10KΩ type temperature sensor. Any of the sensors listed in the [Supported Sensors](#) section are supported on this input.

(D)

C / R Inputs - Connect 24V AC between the R and C terminals. The voltage connected between these two terminals will power the climate module and supply voltage to all relay outputs. See the [Power Connections](#) section below for more information.

Left Side Panel



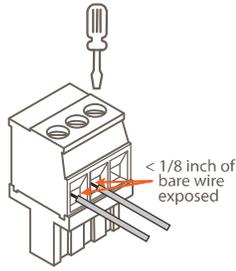
(A)

RS-485 Port - As shown in the image above, the right three pins connect to the RS-485 terminals on the thermostat. Refer to the [RS-485 Connections](#) section for more information on wiring.

Making Connections

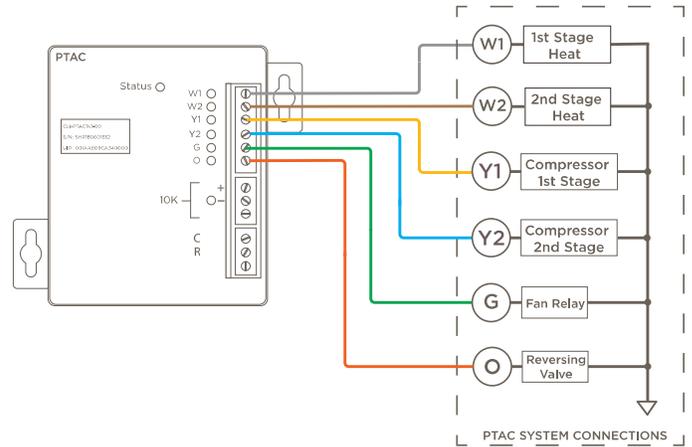
When making connections, follow the guidelines set below to ensure a safe and secure connection.

1. With a small slotted screwdriver, turn the screws on the connector counter-clockwise (CCW) until the silver crimps open enough to slide a wire into the square slots.
2. Strip back insulation on each wire to $\frac{1}{4}$ inch and insert the stripped wire into the proper connection.
3. Turn the screw clockwise (CW) until the crimps tighten around each wire. Tug on each wire a bit to verify they are secure.



Relay Connections

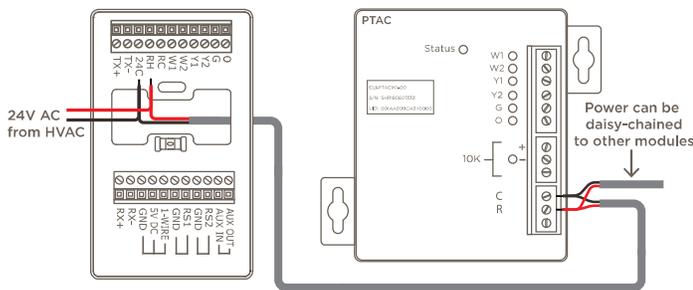
Use the diagrams below when making connections between the relay outputs and the connections at the HVAC equipment.



- Use only HVAC approved cabling to make the connections.
- The CLI-PTAC1K1 also supports PTAC Heat Pump type installations.

Power Connections

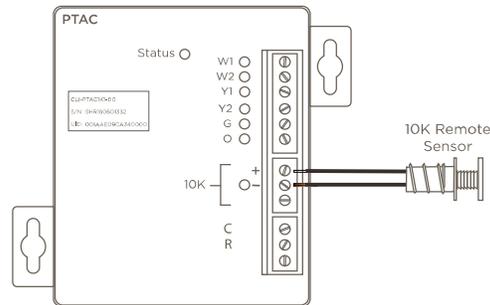
Use the diagrams below when making the power connections between the thermostat and the CLI-PTAC1K1 climate module.



- Power should only be connected across terminals C and R as shown in the diagram above. The input power across the C and R terminal supplies the voltage to power the module as well as all the climate relays.
- Power can be daisy-chained between modules.
- The cable lengths vary depending on the size of the wire. See the specifications table on page 1 for more information.

10K Remote Sensor Connections

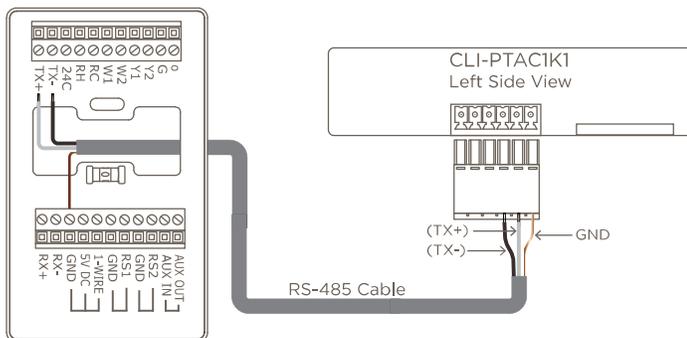
Use the diagrams below when making connections between the 10K remote sensor port and a 10K remote sensor.



- There is no polarity to the 10K temperature sensors.
- Minimum size wire = #24 AWG.
- Maximum cable length = 500 feet (182meters).
- A twisted pair is recommended (E.G. cat 5e/6/7)
- All 10K type temperature sensors available through Savant are supported. See the [Supported Sensors](#) section.

RS-485 Connections

Use the diagrams below when making the RS-485 connections between the thermostat and CLI-PTAC1K1 climate module.



- Savant recommends using standard RS-485 cable for wire runs.
- Max cable length is 1000 feet (304.8 meters).

Additional Information

Refer to the following documents located on the [Savant Customer Community](#) for additional information.

- Multistat Smart Thermostat Deployment Guide (009-1636)
- Multistat Thermostat with Touchscreen QSG (009-1593)